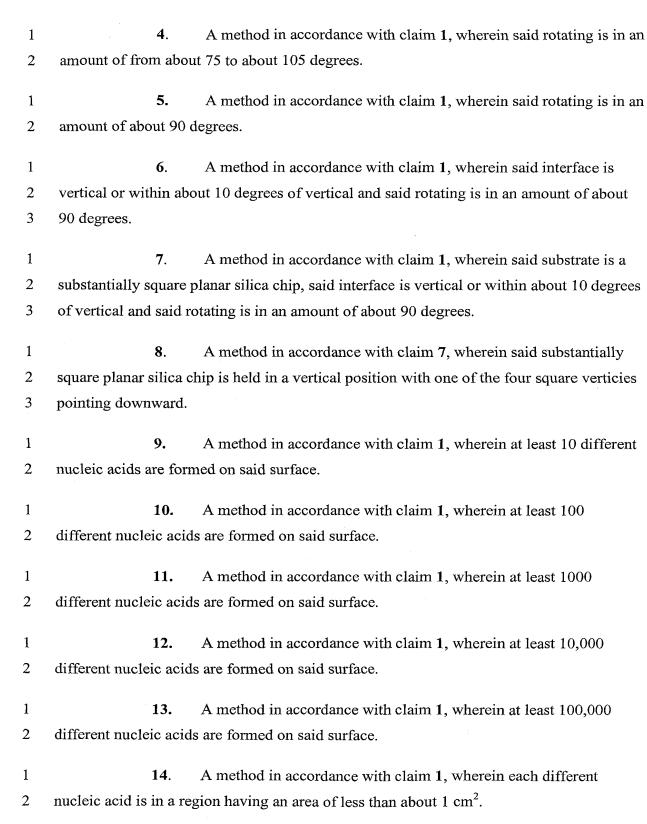


Ţ	1. A method of preparing a nucleic acid array on a support, wherein
2	each nucleic acid occupies a separate known region of the support, said synthesizing
3	comprising:
4	(a) activating a region of the support;
5	(b) attaching a nucleotide to a first region, said nucleotide having a
6	masked reactive site linked to a protecting group;
7	(c) repeating steps (a) and (b) on other regions of said support whereby
8	each of said other regions has bound thereto another nucleotide comprising a masked
9	reactive site link to a protecting group, wherein said another nucleotide may be the same
10	or different from that used in step (b);
11	(d) removing the protecting group from one of the nucleotides bound to
12	one of the regions of the support to provide a region bearing a nucleotide having an
13	unmasked reactive site;
14	(e) binding an additional nucleotide to the nucleotide with an unmasked
15	reactive site;
16	(f) repeating steps (d) and (e) on regions of the support until a desired
17	plurality of nucleic acids is synthesized, each nucleic acid occupying separate known
18	regions of the support;
19	wherein the surface of said substrate is maintained in a position which is vertical
20	or within about 30 degrees of vertical, and
21	wherein the substrate is rotated around an axis perpendicular to said surface by an
22	amount of from about 20 degrees to about 180 degrees, said rotating being
23	done prior to, coincident with or subsequent to at least one of said
24	attaching or binding steps.
1	2. A method in accordance with claim 1, wherein said rotating is
2	conducted prior to, coincident with or subsequent to at least 50% of said attaching or
3	binding steps.
1	3. A method in accordance with claim 1, wherein said rotating is
2	conducted prior to, coincident with or subsequent to at least 80% of said attaching or
3	binding steps.

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nucleic acid is in a region having an area of less than about 1 mm<sup>2</sup>.

A method in accordance with claim 1, wherein each different

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